PATENT COOPERATION I REAT

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

United States Patent and Trademark Office (Box PCT) Crystal Plaza 2 Washington, DC 20231 **ETATS-UNIS D'AMERIQUE**

Date of mailing (day/month/year) 09 December 1997 (09.12.97)

in its capacity as elected Office

International application No.

PCT/GB97/01121

Applicant's or agent's file reference **BAILLIEH 01**

International filing date (day/month/year) 23 April 1997 (23.04.97)

Priority date (day/month/year) 23 April 1996 (23.04.96)

Applicant |

BAILLIE-HAMILTON, William, John

1. The design	nated Office is hereby not	tified of its electio	n made:			
X	he demand filed with the	International Preli	minary Examining 4	on:		No. 18
		19-12-5	mber 1997 (20.1)			Water.
	Commission of the Commission o		mper(1997 (20.1)	語言は本の様々から		
	notice effecting later elec	ction filed with the	a International Sures	iu on:		
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2. The election	on X was	. • •				•
	was not					
	Was not					
made befo	ore the expiration of 19 m	nonths from the p	riority date or, where	e Rule 32 applies, wit	thin the time limit u	ınder
Rule 32.2(b).					
			•			
			•			

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer

S. De Michiel

Facsimile No.: (41-22) 740.14.35

Telephone No.: (41-22) 338.83.38

PATENT COOPERATION TREATY

	Fr m the INTERNATIONAL BUREAU
PCT	То:
NOTIFICATION OF THE RECORDING OF A CHANGE (PCT Rule 92bis.1 and Administrative Instructions, Section 422)	ROCK, Olaf, Colin Rock & Company Trelawn Cassington, Witney Oxford OX8 1DN
Date of mailing (day/month/year) 13 March 1998 (13.03.98)	ROYAUME-UNI
Applicant's or agent's file reference BAILLIEH 01	IMPORTANT NOTIFICATION
International application No. PCT/GB97/01121	International filing date (day/month/year) 23 April 1997 (23.04.97)
The following indications appeared on record concerning: X the applicant X the inventor	the agent the common representative
Name and Address BAILLIE-HAMILTON, William, John 6 Prestwood Terrace Bracknell Berks RG42 1XU UNITED KINGDOM	State of Nationality GB GB Telephone No. Facsimile No. Teleprinter No.
The International Bureau hereby notifies the applicant that the the person	
Name and Address BAILLIE-HAMILTON, William, John Fibre Optic Lamp Company Limited Cardiff Business Technology Center Senghenydd Road Cardiff CF2 4AY South Wales UNITED KINGDOM	State of Nationality GB GB Telephone No. Facsimile No. Teleprinter No.
3. Further observations, if necessary: THE POSTAL REGION OF THE AGENT ON THE D	DEMAND SHOULD READ : OXFORD.
4. A copy of this notification has been sent to: X the receiving Office the International Searching Authority X the International Preliminary Examining Authority	the designated Offices concerned X the elected Offices concerned other:
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740 14 35	Authorized officer Athina Nickitas-Etienne Telephone No.: (41,22) 338 83 38

INTERNATIONAL SEARCH REPORT

In...dational Application No PCT/GB 97/01121

		PCT/GI	3 9//01121
a. classi IPC 6	FICATION OF SUBJECT MATTER H01K1/30 F21V8/00		
	o International Patent Classification (IPC) or to both national class	sification and IPC	
	SEARCHED ocumentation searched (classification system followed byclassific	cation symbols)	
IPC 6	H01K F21V G02B		
Documentat	tion searched other than minimum documentation to the extent that	t such documents are included in the	fields searched
Electronic d	ata base consulted during the international search (name of data b	ase and, where practical, search term	us used)
	IENTS CONSIDERED TO BE RELEVANT		P. L. W.
Category °	Citation of document, with indication, where appropriate, of the	relevant passages	Relevant to claim No.
X	US 3 597 647 A (M.L.RISHTON) 3 A	August 1971	1,2,5,8, 9,12-15, 19-29,32
Υ	see the whole document		3,5-7, 10, 13-16, 18,34-36
Y	US 3 681 592 A (M.HUGELSHOFER) 1972	l August	3,5-7, 10, 13-16,
	see the whole document		18,34-36
X	US 2 362 175 A (H.SWANSON) 7 No	vember 1944	1,2,4,8, 9,17,19, 20,22-25
	see the whole document		
		-/	
X Fur	ther documents are listed in the continuation of box C.	Y Patent family members a	re listed in annex.
° Special c	ategories of cited documents:	"T" later document published after	er the international filing date
	ment defining the general state of the art which is not idered to be of particular relevance		onflict with the application but ciple or theory underlying the
"E" earlier	r document but published on or after the international gdate	"X" document of particular relev cannot be considered novel	or cannot be considered to
whicl	nent which may throw doubts on priority claim(s) or h is cited to establish the publication date of another	"Y" document of particular relev	nen the document istaken alone ance; the claimed invention
"O" docur	on or other special reason (as specified) ment referring to an oral disclosure, use, exhibition or	document is combined with	olve an inventive step when the one or more other such docu-
"P" docum	rmeans ment published prior to the international filing date but than the priority date claimed	in the art. "&" document member of the sar	ing obvious to a person skulled ne patent family
	e actual completion of the international search	Date of mailing of the intern	
2	21 July 1997	28/07/1997	
Name and	mailing address of the ISA	Authorized officer	
	European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo ul, Fax: (+31-70) 340-3016	Malic, K	

1.

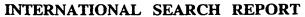


Indication No
PCT/GB 97/01121

C.(Continuativ	on) DOCUMENTS CONSIDERED TO BE RELEVANT	
	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
х	EP 0 304 939 A (HITACHI) 1 March 1989 see page 13; figures 4-6	1,11,23, 33,37
x	DE 41 27 100 A (C.ZEISS) 18 February 1993 see column 2 - column 3; figure 2	1
A	US 5 103 381 A (A.K.UKE) 7 April 1992	
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Information on patent family members

In....ational Application No
PCT/GB 97/01121

Patent document cited in search report	Publication date	Patent family member(s)	Publication date	
US 3597647 A	03-08-71	NONE		
US 3681592 A	01-08-72	NONE		
US 2362175 A	07-11-44	NONE		
EP 0304939 A	01-03-89	CA 1310531 A CN 1033698 A,B DE 3850623 D DE 3850623 T JP 1131506 A US 4946242 A	24-11-92 05-07-89 18-08-94 27-10-94 24-05-89 07-08-90	
DE 4127100 A	18-02-93	NONE		
US 5103381 A	07-04-92	NONE		

PATENT COOPERATION TREAT

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1995

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

			(PC) Afficie 36 and	nule /	<i>)</i>
Applicant's or	agent	's file reference	FOR FURTHER ACTIO	Se∈	Notification of Transmittal of International
BAILLIEH	01			Pre	liminary Examination Report (PCT/IPEA/416)
International application No. International filing date (day/month/year) Priority date (day/month/year)			Priority date (day/month/year)		
PCT/GB97/01121 23/04/1997 23/04/1996				23/04/1996	
International	atent	Classification (IPC) or na	itional classification and IPC		
H01K1/30					
Applicant					
BAILLIE-H	AMIL	TON WILLIAM JOH	N		
1. This int	ernati	ional preliminary exam	ination report has been prepare	d by this In	nternational Preliminary Examining Auth rity
and is t	ransn	nitted to the applicant	according to Article 36.		
2. This RE	POR	IT consists of a total of	5 sheets, including this cover	sheet.	
	!		ed by ANNEXES, i.e., sheets of	the descrit	ntion claims and/or drawings
wh	ich h	ave been amended at	nd are the basis for this report ar	id/or sheet	ts containing rectifications made
be	fore t	his Authority (see Rul	9 70.16 and Section 607 of the A	dministrati	ive Instructions under the PCT).
- .			f		•
These	annex	ces consist of a total o	sneets.		
			 		
3. This re	port c	ontains indications rel	ating to the following items:		
- 1	×	Basis of the report			
11		Priority	of opinion with regard to novelty,	inventive (eton and industrial applicability
111	×			mvenuve :	step and industrial applicability
IV V		Lack of unity of inve		to povoltv	, inventive step or industrial applicability;
V	Ø	citations and explan	ations supporting such statemen	it	, inventive step of industrial applicability,
VI		Certain documents			
VII	×	Certain defects in th	e international application		
VIII			s on the international application		
	_				
Date of subr	nissio	n of the demand	Date of	f completion	n of this report
, Jabi				•	
20/11/1997				(D 5. D& 98
Name and n	nailing	address of the IPEA/	Autho	rized officer	STONE OF STATE OF STA
	Eur	opean Patent Office			
D-80298 Munich		Fran	c , V		
Tel. (+49-89) 2399-0, Tx: 523656 epmu d			one No. (+/	49-89) 2399-2726	

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB97/01121

I. Basis	f the	report
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1.	This report has been drawn on the basis of (substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.):			
	Description, pages:			
	1-29	5	as originally filed	
	Clai	ims, No.:		
	1-37	7	as originally filed	
	Dra	wings, sheets:		
	1/6-	6/6	as originally filed	
2.	The	amendments have	e resulted in the cancellation of:	
		the description,	pages:	
		the claims,	Nos.:	
		the drawings,	sheets:	
3.			een established as if (some of) the amendments had not been made, since they have been beyond the disclosure as filed (Rule 70.2(c)):	
4.	Add	litional observation	s, if necessary:	
			f opinion with regard to novelty, inventive step and industrial applicability	
			e claimed invention appears to be novel, to involve an inventive step (to be non-obvious), able have not been examined in respect of:	
		the entire internat	ional application.	
	×	claims Nos. 22 an	d 32.	
be	caus	se:		

INTERNATIONAL PRELIMINARY **EXAMINATION REPORT**

International application No. PCT/GB97/01121

	the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (<i>specify</i>):
×	the description, claims or drawings (indicate particular elements below) or said claims Nos. 22 and 32 are so unclear that no meaningful opinion could be formed (specify):
	see separate sheet
	the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
	no international search report has been established for the said claims Nos

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: No:

Claims 3,5-7,10,11,14,16-19,22,26-37

Claims 1, 2, 4, 8, 9, 12, 13, 15, 20, 21 and 23-25

Inventive step (IS)

Yes:

Claims 18,19,22,26-32

No:

Claims 1-17, 20, 21, 23-25 and 33-37

Industrial applicability (IA)

Yes:

Claims 1-37

No:

Claims

2. Citations and explanations

see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

To point III:

1. Claims **22 and 32** contain references to the description and/or the drawings.

According to Rule **6.2(a)** PCT, claims should not contain such references except where absolutely necessary, which is not the case here.

To point V:

Reference is made to the following documents:

D1 = US-A-3597647

D2 = US-A-3 681 592

D3 = US-A-2 362 175

D4 = EP-A-0 304 939

- Document D1 discloses (cf. Figures 1-4 and 8-11 and the corresponding text) a light emitting device comprising the features of claims 1, 2, 4, 8, 9, 12, 13, 15, 20, 21 and 23-25. In particular, Figure 3 shows refracting means according to claims 4 and 15. In consequence, the subject-matter of these claims is no new.
- 2. Claim 33 does not involve an inventive step. A light guide array is known from D3 (cf. Figures 1-4). Its use with the light emitting devices known from D1 is an obvious alternative for a skilled person.
- 3. Dependent claims 3, 5-7, 10, 11, 14, 16, 17 and 34-37 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step, the reasons being as follows:
 - Claims 3, 5-7, 14, 16: an opaque containment, heat sinks forming an integral part of the containment and in intimate contact with the light conducting element and reflecting means are known from the prior art (cf. D2, Figures 1 and 3).
 - Claims 10, 11, 17 and 34 to 36: relate to slight constructional changes which come within the scope of the customary practice followed by persons skilled in the

art, especially as the advantages thus achieved can be readily contemplated in advance.

Claim 37: the mere provision of a plurality of devices does not involve an inventive step (see for example D4, Figure 6).

To point VII:

- 1. Independent claims 1, 26 and 33 are not in the two-part form in accordance with Rule 6.3(b) PCT.
- 2. The features of the claims are not provided with reference signs placed in parentheses (Rule **6.2(b)** PCT).
- 3. Contrary to the requirements of Rule **5.1(a)(ii)** PCT, the relevant background art disclosed in the documents **D1-D4** are not mentioned in the description, nor are these documents identified therein.

P.42

EATY PATENT COOPERATION

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PCT

NOTICE INFORMING THE APPLICANT OF THE COMMUNICATION OF THE INTERNATIONAL

(PCT Rule 47.1(c), first sentence)

APPLICATION TO THE DESIGNATED OFFICES

From the INTERNATIONAL BUREAU

ROCK, Olaf, Colin Rock & C mpany Trelawn Cassington, Witney Oxford OX8 1DN **ROYAUME-UNI**

Date of mailing (day/month/year)

30 October 1997 (30.10.97)

Applicant's or agent's file reference

BAILLIEH 01

IMPORTANT NOTICE

International application No.

PCT/GB97/01121

International filing date (day/month/year)

23 April 1997 (23.04.97)

Priority date (day/month/year) 23 April 1996 (23.04.96)

Applicant

BAILLIE-HAMILTON, William, John

Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this Notice:

AU,BR,CA,CN,EP,IL,JP,KP,KR,NO,PL,SK,US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present Notice as conclusive evidence that the communication of the International application has duly taken place on the date of mailing indicated above and no copy of the international application in accordance on the date of mailing indicated above and no copy of the international application in accordance on the date of mailing indicated above and no copy of the international application in accordance with Rule 47.1(c), third sentence, those Offices will accept the present Notice as conclusive evidence that of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

AL,AM,AT,AZ,BA,BB,BG,BY,CH,CU,CZ,DE,DK,EE,ES,FI,GB,GE,HU,İS,KE,KG,KZ,LC,LK,LR,LS, LT,LU,LV,MD,MG,MK,MN,MW,MX,NZ,PT,RO,RU,SD,SE,SG,SI,TJ,TM,TR,TT,UA,UG,UZ,VN

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this Notice is a copy of the international application as published by the international Bureau on 30 October 1997 (30.10.97) under No. WO 97/40520

REMINDER REGARDING CHAPTER II (Article 31(2)(a) and Rule 54.2)

If the applicant wishes to postpone entry into the national phase until 30 months (or later in some Offices) from the priority date, a demand for International preliminary examination must be filed with the competent International Preliminary Examining Authority before the expiration of 19 months from the priority date:

It is the applicant's sole responsibility to monitor the 19-month time limit.

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

REMINDER REGARDING ENTRY INTO THE NATIONAL PHASE (Article 22 or 39(1))

If the applicant wishes to proceed with the international application in the halional phase, he must, within 20 months or 30 months, or later in some Offices, perform the acts referred to therein before each designated or elected Office.

For further important information on the time limits and acts to be performed for entering the national phase, see the Annex to Form PCT/IB/301 (Notification of Receipt of Record Copy) and Volume II of the PCT Applicant's Guide.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geheva 20, Switzerland

Authorized officer

J. Zahra

Telephone No. (41-22) 338.83.38

1743228

Facsimile No. (41-22) 740.14.35

REQUEST

1583 International Filing Date

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

Name of receiving Office and "PCT International Application"

For receiving Office use only -

Applicant's or agent's file reference

(if de	sired) (12 characters maximum) BAILLICH 01			
Box No. 1 TITLE OF INVENTION	_			
Light Emitting Device and	l Arrays Thereof.			
Box No. U APPLICANT				
Name and address: (Funily name followed by given name: for a legal entity. fu The address must include postal code and name of country. The country of the ad Box is the applicant's State (i.e. country) of residence if no State of residence is				
BAILLIE-HAMILTON William John	Telephone No.			
6 Prestwood Terrace	01344 642497			
Bracknell Berks RG42 1XU	Facsimile No 01344 642497			
GB	Teleprinter No.			
State (i.e. country) of nationality: GB	ate (i.e. country) of residence;			
	The state of the s			
This person is applicant all designated for the purposes of: all designated states of the United States of				
Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER)	INVENTOR(S)			
Name and address: (Family name followed by given name; for a legal entity, full official designation, The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (i.e. country) of residence if no State of residence is indicated below.) applicant only				
	applicant and inventor			
	inventor only (If this check-box is marked do not fill in helow.)			
Topical Pinner and Pin				
State (i.e. country) of nationality:	de (i.e. country) of residence:			
This person is applicant all designated all designated States for the purposes of:	the United States the States indicated in f America only the Supplemental Box			
Further applicants and/or (further) inventors are indicated on a co	ontinuation sheet.			
Box No. IV AGENT OR COMMON REPRESENTATIVE; OR	ADDRESS FOR CORRESPONDENCE			
The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:				
Name and address: (Family name followed by given name; for a legal entity, full official designation. Telephone No.				
The address must include postal code and name of coun	01865 880389			
ROCK Olaf Colin	Facsimile No			
Rock and Company Trelawn, Cassington	01865 882786			
Witney, Oxford OX8 1DN	Teleprinter No.			
GB	ļ <u>-</u> -			
Mark this check-box where no agent or common representative is indicate a special address to which correspondence should be sent	Thas been appointed and the space above is used instead to			

Box N		DESIGNATION OF STATES			
The fo	The following designations are hereby made under Rule 4.9(a) (mark the applicable check-boxes; at least one must be marked):				
		•			•
L	AP ARIPO Patent: KE Kenya, LS Lesotho, MW Malawi, SD Sudan, SZ Swaziland, UG Uganda, and any other State which				
Ц		ic a Contracting State of the Harafe Protocol and of U	ie ru	. 1	
	EA	Moldova, RU Russian Federation, 13 Tajikistan, 11 of the Eurasian Patent Convention and of the PCT	1 1 11	Kinen	us, KG Kyrgyzstan, KZ Kazakstan, MD Republic of istan, and any other State which is a Contracting State
Ø	EP	European Patent: AT Austria, BE Belgium, CH and LI Switzerland and Licchtenstein, DE Germany. DK Denmark, ES Spain, FI Finland, FR France, GB United Kingdom, GR Greece, IE Ireland, IT Italy, LU Luxembourg. MC Monaco, NL Netherlands, PT Portugal, SE Sweden, and any other State which is a Contracting State of the European Patent Convention and of the PCT			
	OA OAPI Patent: BF Burkina Faso, BJ Benin, CF Central African Republic, CG Congo, CI Côte d'Ivoire, CM Cameroon, GA Gabon, GN Guinea, ML Mali, MR Mauritania, NE Niger, SN Senegal, TD Chad, TG Tugo, and any other State which is a member State of OAPI and a Contracting State of the PCT (if other kind of protection or treatment desired, specify on dotted line)				
		atent (if other kind of protection or treatment desired,			
	na) Pa A I	Albania	(XI	LU	Luxembourg
N N		Amenia	M		Latvia
		Austria	\square	MD	Republic of Moldova
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		Belarus	Š		Norway
		Canada			New Zealand
		and I.I Switzerland and Liechtenstein			Poland
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		Czech Republic	図		Russian Federation
		Germany		SD	Sudan
		Denmark	図	SE	Sweden
		Estonia		SG	Singapore
	_	Spain		ŞI	Slovenia
	ES	Finland			Slovakia
	FI		区	SK	Tajikistan
		United Kingdom		TJ TM	Turkmenistan
図		Georgia			Turkey
		Hungarylsrael	図		Trinidad and Tobago
	IL		区	TT	
	IS	Iceland	区		Ukrainė
		Japan	図		Uganda
	KE	Kenya	X	UŞ	United States of America
	KG	Kyrgyzsten Democratic People's Republic of Korea	_		***************************************
	KP	Democratic reopte's Republic of Rollow			Uzbekiştan
_		Republic of Korea	X	VN	Vict Nam
ᅵ닏		Kazakstan	Che	ck-bo	exes reserved for designating States (for the purposes of
		-	а па	aliona	I patent) which have become party to the PCT after of this sheet:
		Saint Lucia	1550		OI fulz zueet:
		Sri Lanka	H		
		Lesotho	7		
		Lithuania	H		
In a	In addition to the designations made above, the applicant also makes under Rule 4.9(b) all designations which would be permitted under the PCT except the designation(s) of under the PCT except that those additional designations are subject to confirmation and that any designation which is not confirmed				

The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. (Confirmation of a designation consists of the filing of a notice specifying that designation and the payment of the designation and confirmation fees. Confirmation must reach the receiving Office within the 15-month time limit.)

Sheet No.

TC
1

Box No. VI PRIORITY CI				re indicated in	the Supplemental Box
The priority of the following ea	urlier application(s) is hereby claimed	l:		Office of filing
Country (in which, or for which, the application was filed) Filing (day/mon			Application No.		(only for regional or international application)
ilem (1) GB	23 April	1997	960838.1		GB
item (2) GB	4 March	1997	9704423.4		GB
item (3) GB	4 April	1997	9706862.		GB
Mark the following check-box if the application is the receiving Office to Bureau a certified copy to	nereby requested to of the earlier appli	and trans	mit to the Internation above as item(s):		rposes of the present international
			I was al Sague	hing Authorities	
Choice of International Seas are competent to carry out the inter Earlier search Fill in where a se out or requested and the Authority such search or request either by re Country (or regional Office):	earch (international, is now requested to be ference to the releve	international-type of	other) by the Internati	onal Searching A	ults of that earlier search. Identify
Box No. VIII CHECK LIS	1		·		
This international applicate the following number of shear the fol	e cts: 3 sheets	separal power	e siened	5. fee ca	item(s) marked below: alculation sheet rate indications concerning sited microorganisms
3. claims : 6 4. abstract : 1	5 sheels 1 sheels	statem	ent explaining Signature	7. nucle sequ	eolide and/or amino acid ence listing (diskette)
	5 sheets	identif	y document(s) ied in Box No. VI	8. other	r (specify):
10(8)	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	as item	ny the abstract when	it is published.	
			ay the depliner street		
Box No. IX SIGNATURE	OF APPLICAN	ning and the capacity i	in which the person signs	(if such capacity is	not obvious from reading the request).
Ode	ROCK	X			
		- For receiving	Office use only —		2. Drawings:
 Date of actual receipt of the international application: 					
3. Corrected date of actual re timely received papers or the purported internations	received:				
4. Date of timely receipt of corrections under PCT A	the required				not received:
5. International Searching A specified by the applicant	uthority ISA /	6	until search		delayed
Date of receipt of the record by the International Bureau:	Сору	For Internation	ai Bureau use only 🗕		



WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6: H01K 1/30, F21V 8/00

A1

(11) International Publication Number:

WO 97/40520

(43) International Publication Date:

30 October 1997 (30.10.97)

(21) International Application Number:

PCT/GB97/01121

(22) International Filing Date:

23 April 1997 (23.04.97)

(30) Priority Data:

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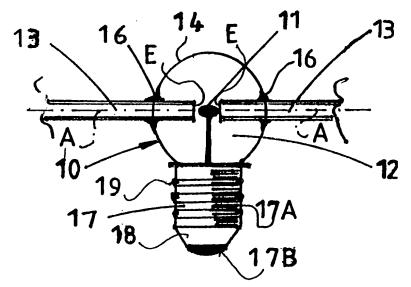
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(54) Title: LIGHT EMITTING DEVICE AND ARRAYS THEREOF

(57) Abstract

A light outputting device comprises: a containment (14) for housing an element for emitting light (11); at least one axially extending light conducting element (13) having an axial length substantially greater than its width transverse the axis; the light conducting element (13) being aligned axially with the element for emitting light (11) by means of the containment (14) or an extension thereof; the, or each, light conducting element (13) having a light input region such as an end face whereby light generated by the element for emitting light (11) is caused to pass axially into the or each light conducting element (13) by way of its associated light input region. Typically the axial length of the light conducting element (13) is at leat three times

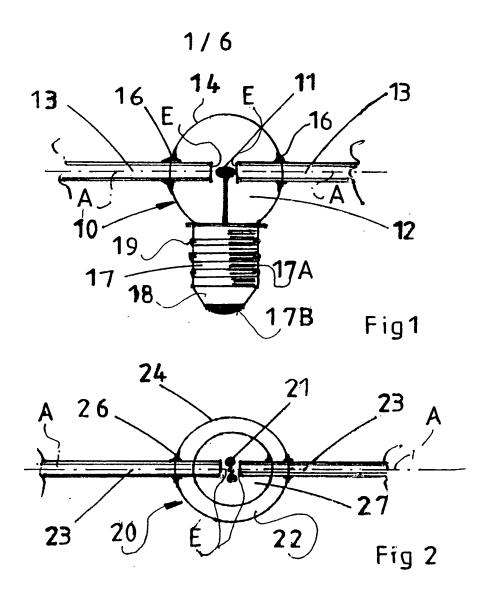


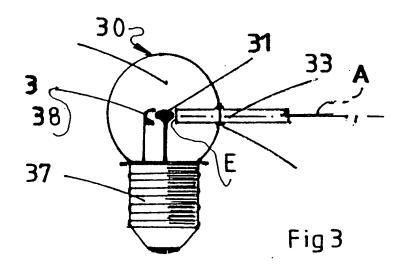
its width transverse the axis. The containment (14) or an extension thereof serves to locate the element for emitting light (11) closer to the light input region of the, or each, light conducting element (13) than to the major part of the containment (14) remote from the light input region or regions.

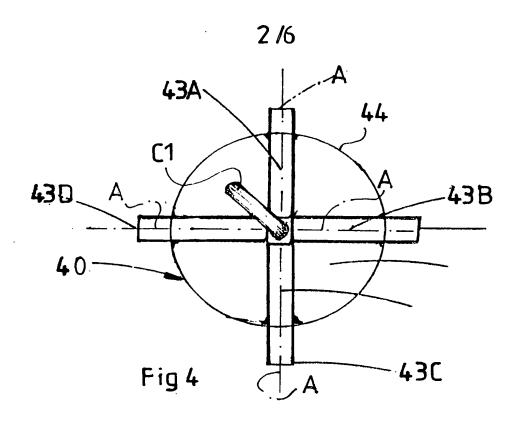
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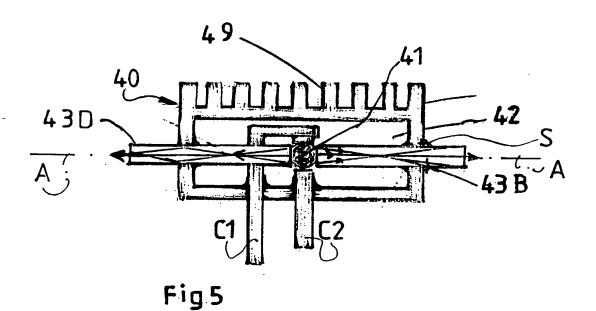
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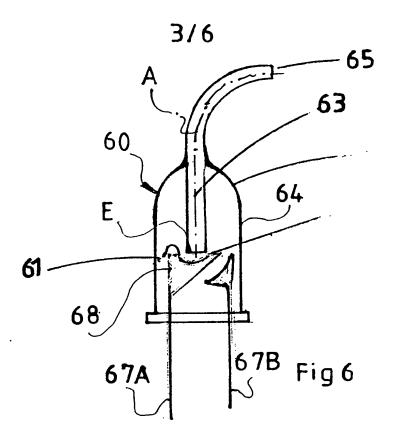
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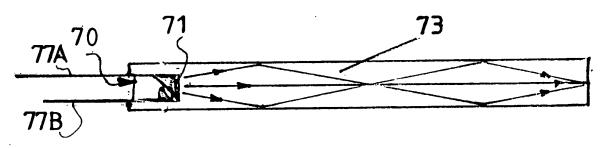


Fig 7

